Data Center Consolidation Implementation and Migration Planning Team

Project Initiative 6.
Data Center Consolidation

December 9, 2004

Discussion Overview

Impetus for the study (House File 534):

- The Legislature is looking for Value from Information Technology investments, to be more responsive, and cost effective by asking…
  - *How can investments in technology add maximum value to the State?*
  - *How can we increase cost effectiveness on a statewide basis?*
  - *How can we provide a greater focus on the core mission of the State?*
  - *How can we effectively manage scarce resources and improve service delivery?*
- An 'Impact Assessment' was conducted across a framework of three performance levels: Process, Technology, and Organization

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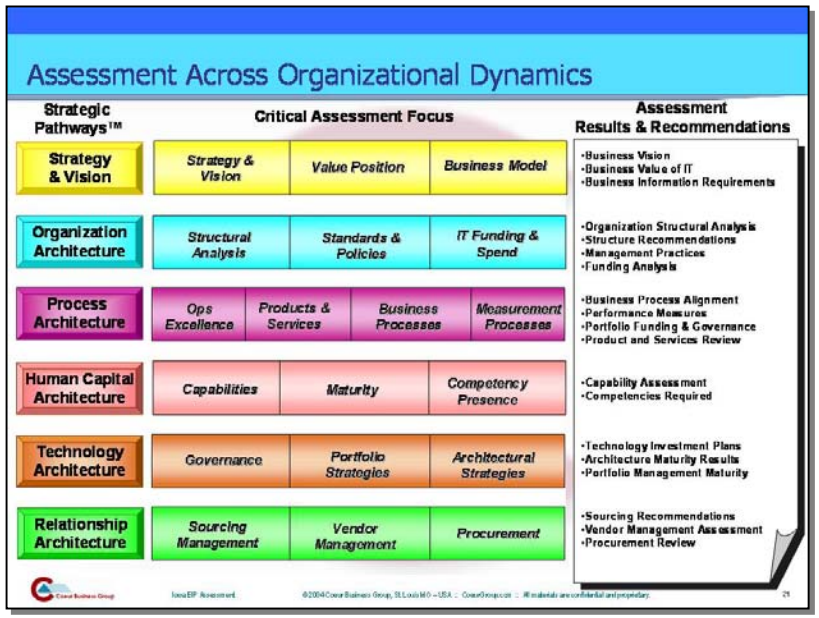
Organizational Assessment Model

Identifying the State's IT Operations

- Value of IT to the State
- Increase Effectiveness
- Leverage Assets and Resources
- Define Maturity of Infrastructure
- Scorecards & Measures
- Generate and Capture Value
- Portfolio Management Capability
- Governance Methods/Processes
- Transformation Capabilities
- Collaboration & Innovation
- Credibility and Dependency

Assessment Pathways



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132 IT Employees
20% Population
Assessed

Critical Success Factors

Best Practice Comparison

House File 534

Client/Vendor Interface

Infrastructure Views

Funding Assessment

Human Capital Utilization

Job Class Benchmarks

<250 Individual Interactions

Operational Plans

Common Executive Vision

IT Productivity

4 Focus Mandates

CRM Capability

Infrastructure Patterns

Federal, Grants General Funds Flow

DOM CFO Validation

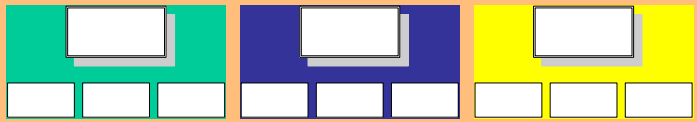
IT Budget Reviews

Fund Matching

Cost Impacts

Investment Requirements

3 Organizational Scenarios

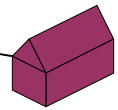


4 Process Improvements
- Governance Process
- Architecture Process
- Procurement/Vendor Mgt.
- Enterprise Portfolio Mgt. And PMO

4 Cost Impact Programs
- Infrastructure Consolidation
- Data Center Consolidation
- Hardware Lifecycle
- Application Consolidation

Departmental Business Drivers/Barriers

Department Information Requirements



META Group
Forrester
Gartner
Validation

Human Capital Mgt Research

Performance Measures

Program & Risk Assessment

State Peer Group Executive Reviews

Transformation Progress

6 Architectures

Organizational Patterns

Transformation Plan

Transformation Requirements

Operational Maturity

Architecture Utilization

Innovative Departmental IT Implementation

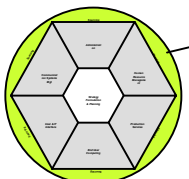
IT Credibility Dependency

Peer Transition Success/Barriers

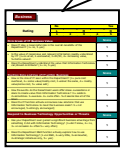
PMBOK Benchmarks

Project Manager

ID'd Savings Categories

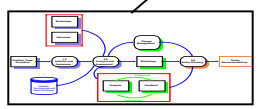


CoBIT-ITIL Operational Assessment

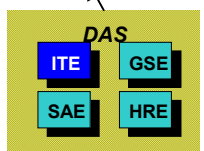


IT Value Survey

50 State Departmental Research



Project Process & Methods



Client Engagement Database

IT Spend Patterns & Benchmarks

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Iowa Common Business Drivers

1. Security
    1. *User access*
    2. *Homeland Security*
    3. *Intrusion Detection*
2. Data Management
    1. *Integrity*
    2. *Accessibility*
    3. *Storage*
3. Regulatory
    1. *Compliance*
    2. *Federal /State Programs*
4. Cost Management
    1. *Effectiveness/Efficiencies*
    2. *Avoidance*
5. Service Delivery
    1. *Problem Management*
    2. *Change Management*
    3. *Service Level Agreements*
6. Business/Constituent Alignment
    1. *Funding Process*
    2. *Constituency Alignment*
    3. *Strategic Focus*

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Critical Performance Directives

- Critical performance directives (a "Common Executive Vision") emerged from Senior Management interviews and workshops:
  - *Provide Reliability*
  - *Responsiveness and accessible information*
  - *Higher levels of communications to understand business requirements*
  - *Make it easy to do business with IT*
  - *Always be cost competitive*
  - *Invest in IT to improve my departments business*
  - *We require IT competence*
  - *IT must fulfill commitments made*

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Implementation and Migration Planning

Key Recommendations

Process Improvements

- *Technology Governance*
- *Statewide Enterprise Architecture Steering Committee*
- *Enterprise Portfolio Management Office*
- *Centralized Sourcing and Procurement*

Program Initiatives

- *Leverage Common Statewide Infrastructure*
- *Data Center Consolidation*
- *Hardware Lifecycle Program*
- *Application Inventory and Consolidation*

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Team Norms

- Act as colleagues
- Distribution List - Chair
- Spirit of brainstorming
- Spirit of inquiry
- Develop a deeper, broader sense of unity
- Stay on topic - Parking Lot Issues

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Team Chair

Nominate/Select a Team Chair

1. Collaborate on weekly status report
2. Coordinate Team activities
3. Act as a spokesperson for the group
4. Liaison to Iowa Project Management (Wes Hunsberger)
5. Responsible for joint presentations

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The Assignment

Transform the Strategic Initiative as defined by the Enterprise Infrastructure and Personnel (EIP) Assessment Final Report into activities for defining steps of implementation.

- *How can investments in technology add maximum value to the State?*
- *How can we increase cost effectiveness on a statewide basis?*
- *How can we provide a greater focus on the core mission of the State?*
- *How can we effectively manage scarce resources and improve service delivery?*

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Agenda

Project Launch Workshop December 9th		
Time	Agenda Item	Assignment
8:30 – 8:45	introductions	Coeur Group
8:45 – 9:00	Presentation	All
9:00 – 9:15	Team Norms	Coeur Group
9:15 – 9:20	Team Chair	All
9:20 – 9:45	Team Mission	Chair – All
9:45 – 10:00	Break	All
10:00 – 11:15	Activity Workshop	All
11:15 – 11:30	Wrap up and Next Steps	Chair and Coeur Group

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Team Deliverables by January 11, 2005

- Conduct workshops
  - *Thursday December 9 – launch project, including:*
    - Understand recommendation
    - Select team chair
    - Write team mission
    - Identify key activities required to implement the recommendation
    - Wrap-up with weekly progress message
  - *Thursday December 16 – "flesh out" activities, considering:*
    - Risk, impediments, event horizon, culture, implementation cost, etc.
  - *Tuesday December 21 – draft presentation package*
  - *Tuesday January 11– complete presentation package*
- Develop key activities plan and framework for recommendations
- Create a presentation package for Governor Vilsack describing the recommended course of action

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The Recommendation

Recommendation 6: Data Center Consolidation

6. Map a timeline for taking advantages of a Data Center Consolidation—Facilities, Servers, Midrange Equipment, etc., Consolidating All Servers into a "Virtual" Server Farm, Reducing Servers from the State's Inventory and Making Corresponding Reductions to Agency and IT/ITE Server Administration Labor. Consolidation allows higher levels of security and business continuity/disaster recovery. Lower labor costs in management of Data Centers and lower facility costs.

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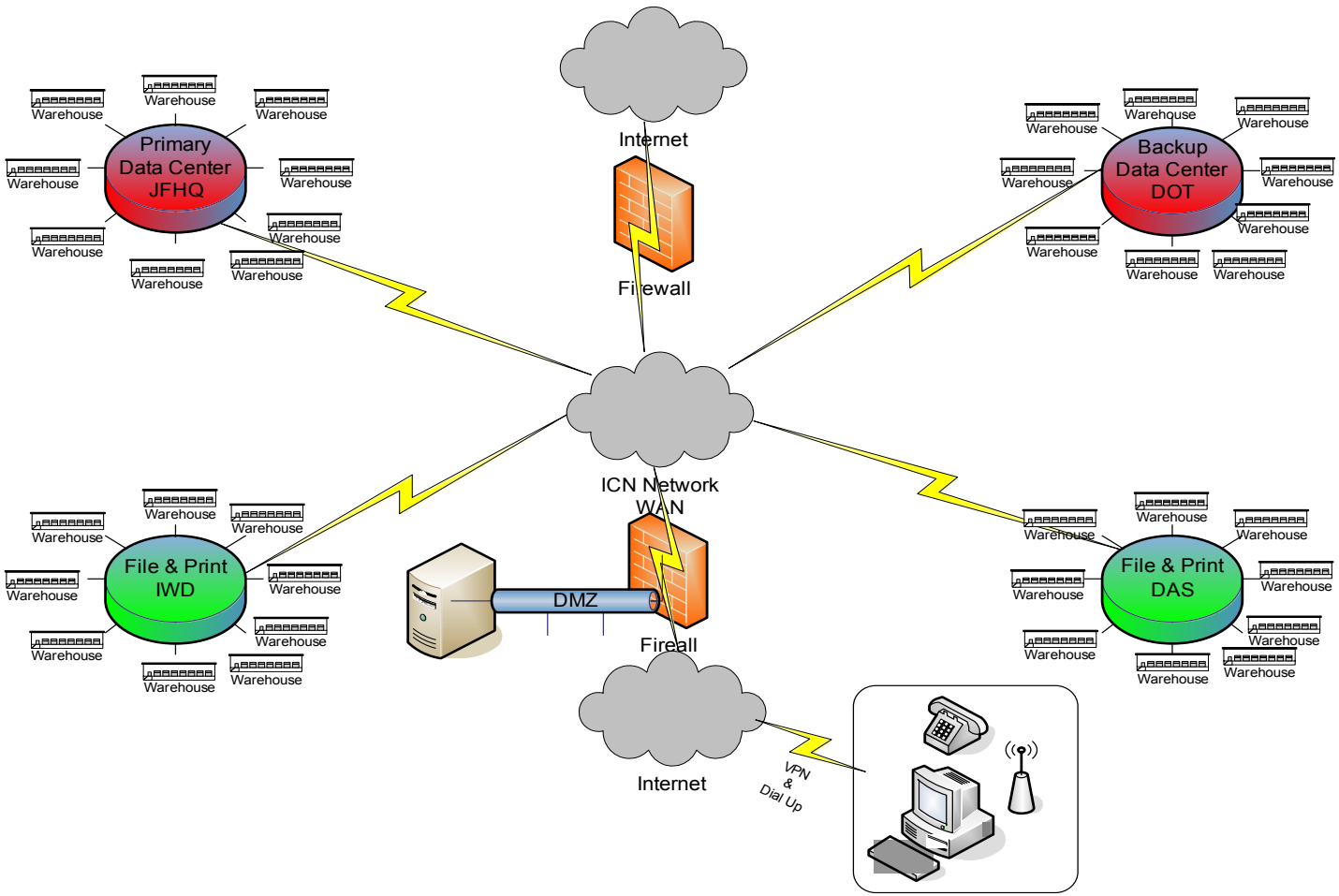
Network Consolidation



3 Year Program

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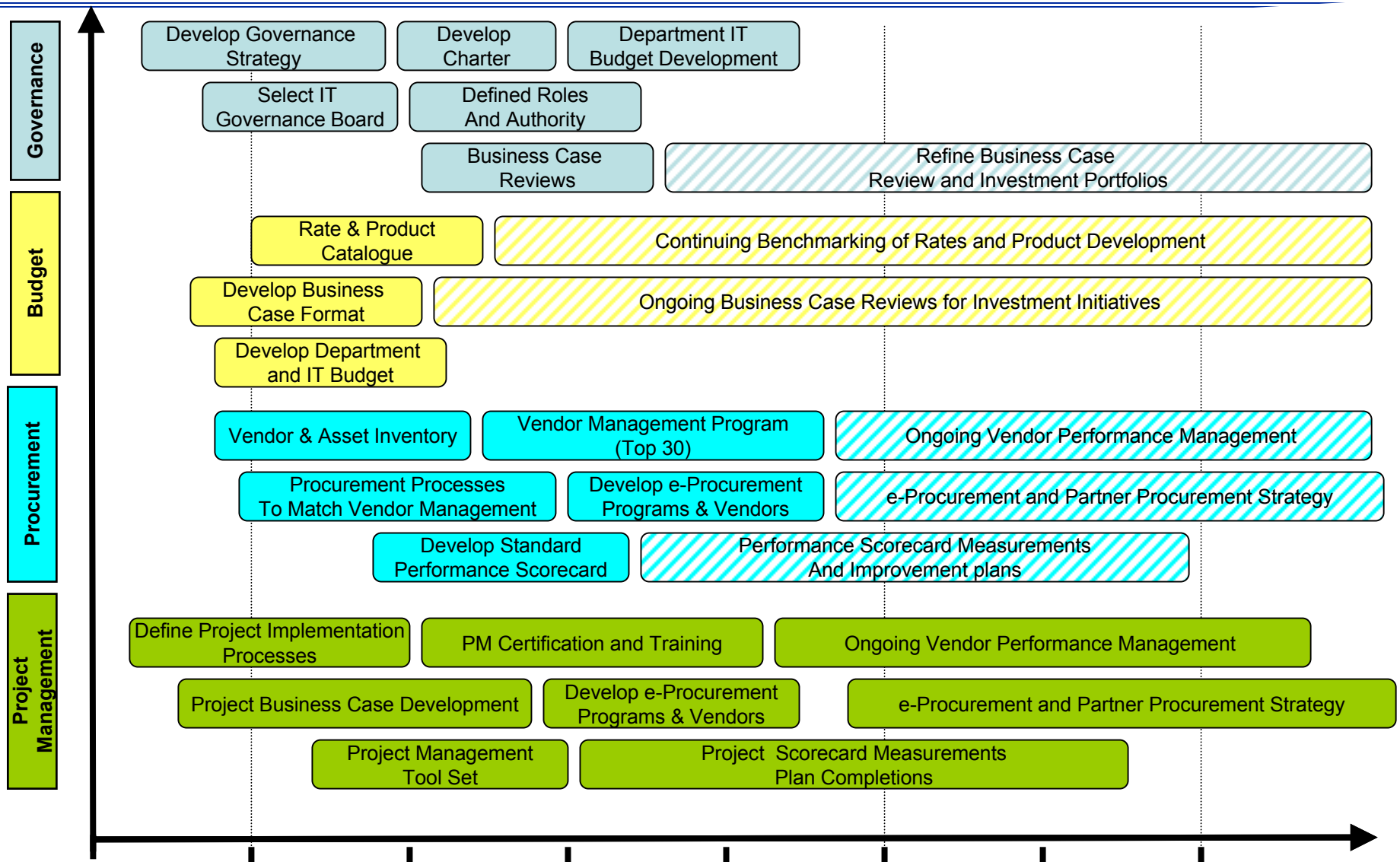
Process Transition Overview



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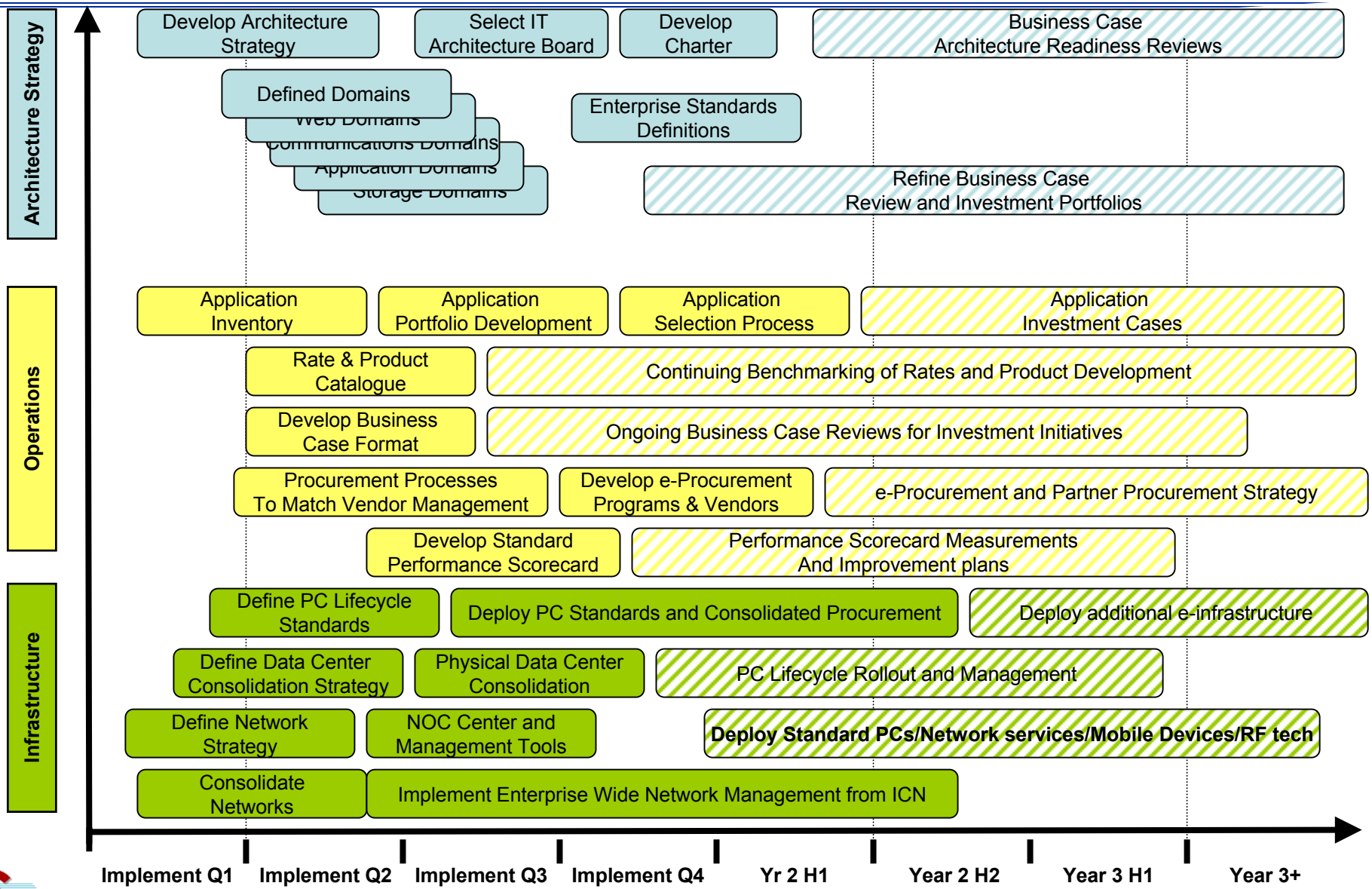
Technology Transition Plan- Overview



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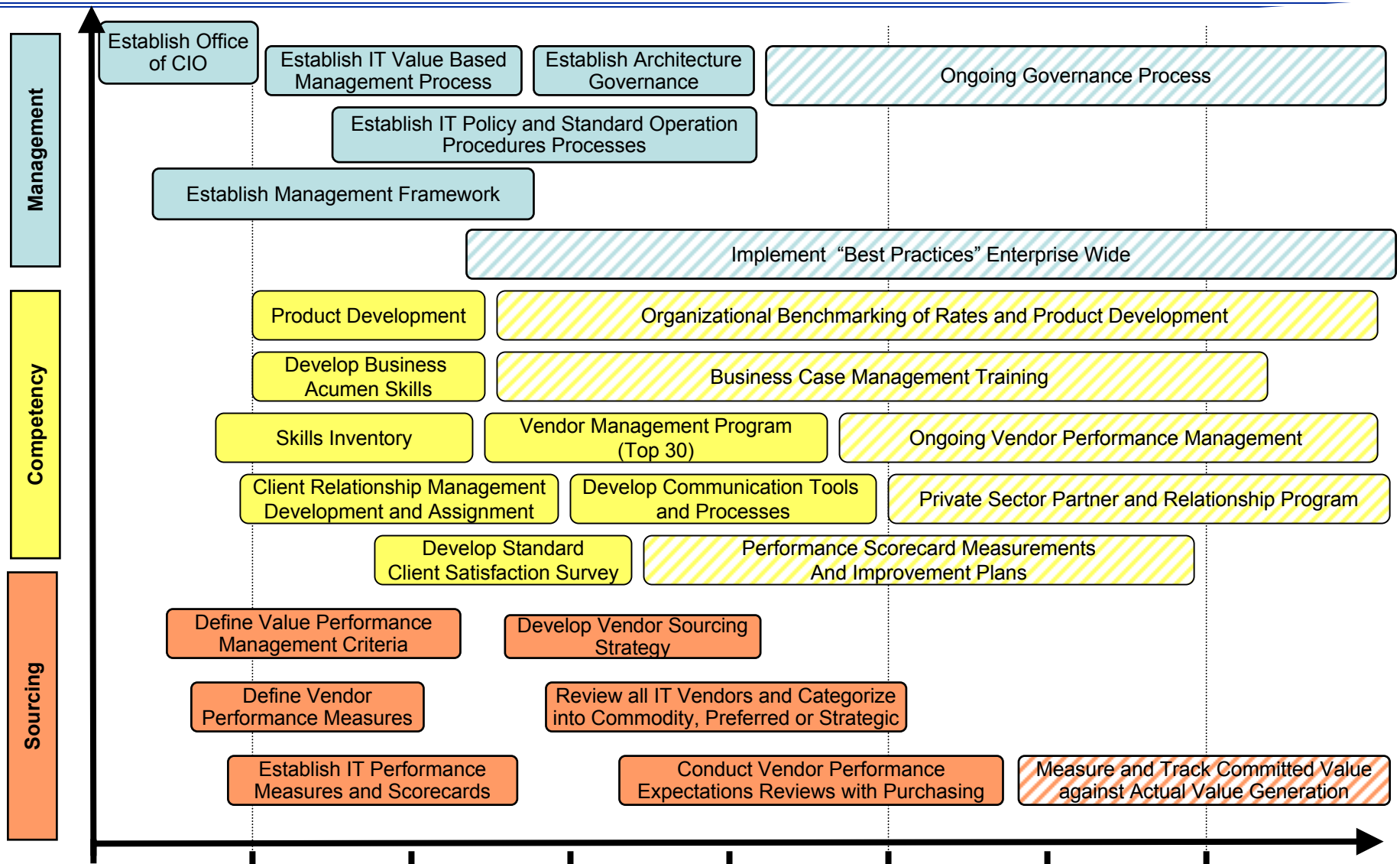
Organization Transition Plan- Overview



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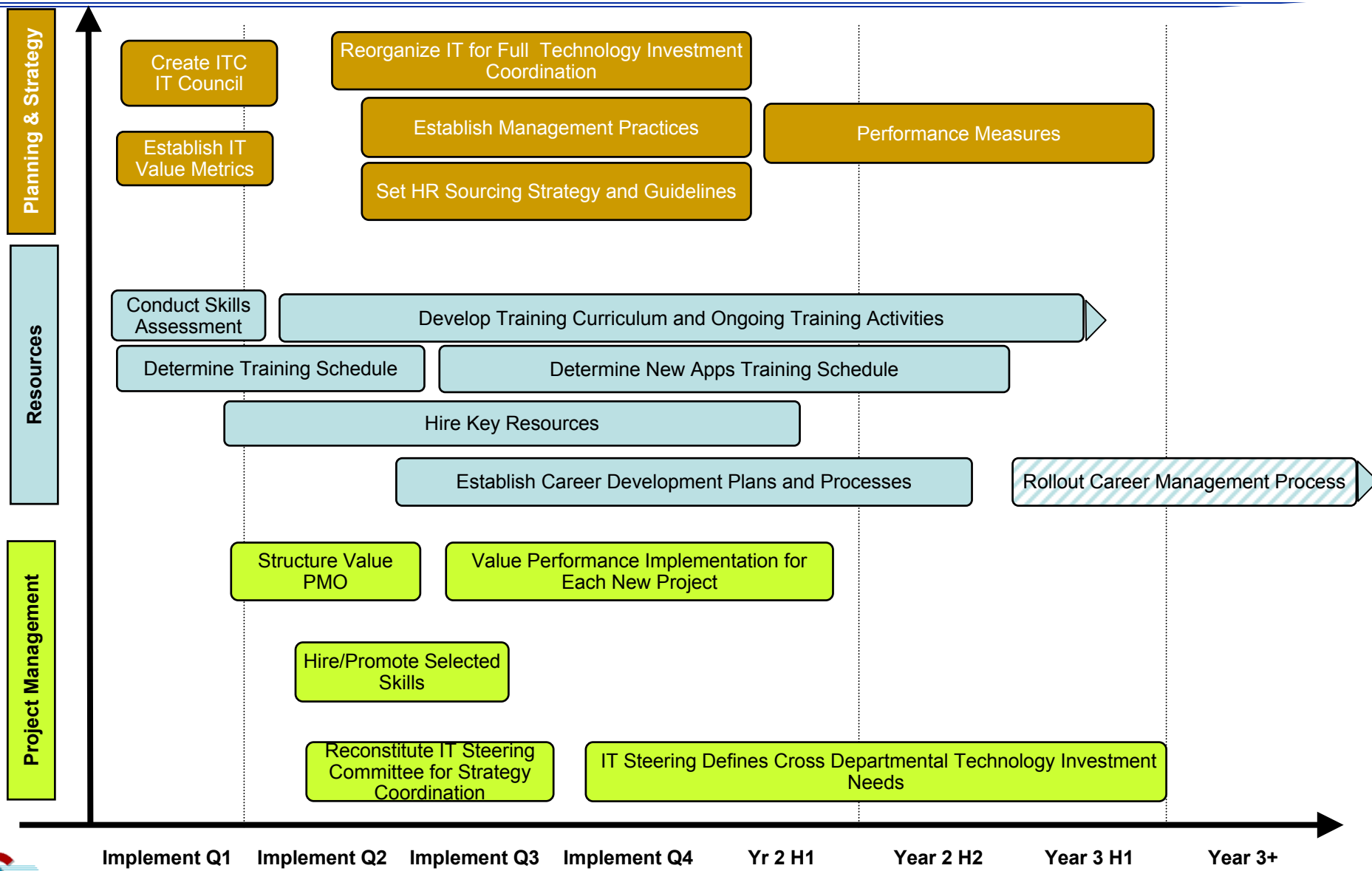
Organization Transition Plan- Overview



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Mission Statement

Data Center Consolidation

Mission Statement

Data Center Consolidation

The Data Center Consolidation Implementation and Migration team will develop a high-level work plan to provide a list of activities, considerations and timeline for implementation, taking into account the impact on service levels, business models and Return On Investment (ROI).

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Key Data Center Consolidation Activities

Key Activities

Groups	Key Activities
1. Identify current state	1. Timelines and milestones
2. Review strategic needs	2. Performance measures
3. Develop considerations and business process effects.	3.
4. Develop and implement consolidation plan.	4.
5. Continually review and audit service and financial impact.	5.
6.	6.
7.	7.
	8.
	9.
	10.

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Activities

1 Develop an Asset Management Program:

A complete inventory of equipment and network topology:

- What (make, model, OS, processor, software, operating procedures, versioning, application tools)
- Configurations
- Leased/purchased
- Business requirements for services and life cycle plans.
- Funding sources for asset, usage restrictions
- Contract/vendor information
- Data storage needs
- Asset Location (Staff and Hardware)
- Facilities inventories

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Activities (continued)

1 Compile an inventory of business applications (business requirements and capacity planning)

2 Compile an inventory of current projects (business and IT enhancements/upgrades)

2 Compile a listing of upcoming projects (business and IT enhancements/upgrades)

1 Gather current User information

- Types/groups and estimated numbers of users by location (remote, etc.)
- Current access, to what and method of access

2 Gather planned User information

- Types/groups and estimated numbers of users by location (remote, etc.)

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Activities (continued)

Disaster Recovery and Business Continuity:

1 Document Business Impact Analysis

1 Document current Disaster Recovery – Business Continuity practices

2 Define future Disaster Recovery – Business Continuity

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Activities (continued)

3 Communications Plan

Compile a list of groups that need to be informed during transition and what their primary interest is to ensure the appropriate communication process:

- Stakeholders
- Business Partners
- Constituencies

1 Document current agency performance requirements

2 Document planned agency performance requirements

3 Document future agency performance requirements

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Activities (continued)

3 Compile a list of applicable considerations:

- Federal Requirements, (program, funding, usage, ownership)
- Funding sources
- Iowa Code citations – someone will need to assess and provide recommendations/options
- Administrative rules
- Voluntary or mandatory or partnership participation
- Business relationships
- User service levels
- Collective Bargaining
- Business partner contractual requirements
- Hardware and Software replacement cycle
- Transition/migration costs
- Cost affordable service offerings/packages and rates

4 Conduct a detailed cost analysis to:

- Fully build out facility options, to include accessibility and feasibility
- Relocation (staff, equipment, connectivity, traffic application performance)
- Vacate current locations
- Reuse of equipment
- Business service impact
- Develop service offerings/packages and rates

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Activities (continued)

4 Establish PMO for the transition

4 Appoint project managers for the transition

1 Document current performance measures, scorecards and results documents

4 Develop performance measures, scorecards and results documents

5 Review performance measures, scorecards and results documents

1 Document portfolio of Service Level Agreements

4 Develop portfolio of Service Level Agreements

5 Review portfolio of Service Level Agreements

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Activities (continued)

4 Develop a prioritization methodology and implementation plan

1 Document current business to business processes

2 Define strategic business to business processes

3 Alignment of IT to agency business to business processes

3 Ensure a strong business relationships between agency and IT

4 Acquire "Business Relationship Managers" to develop program policy, strategic and tactical plans

4 Acquire vendor relationship managers to define performance expectations and development performance measures; manage vendor contractors

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Activities (continued)

2 Develop a process to identify the "new" core business / technology and how to source

3 Review a process to identify the "new" IT core business / technology

1 Document current privacy/security requirements and project future needs.

2 Document planned privacy/security requirements and project future needs.

4 Establish a problem reporting process and trouble ticket system

1 Identify and document current operational procedures

4 Identify and document planned operational procedures

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Activities (continued)

Identify and consolidate updated Homeland Security threat level escalation plans

Establish and implement performance monitoring tools, document results and link to applicable Service Level Agreements

Establish an enterprise sourcing program

Develop new network standards and topology, including data center connectivity, NOC administration and remote management.

Develop transition plan for providing interim services.

Develop equipment redirection and retirement plans

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